

APPROVAL OF MANUFACTURER CERTIFICATE

This is to certify:

That
SAKANA, S. COOP.
Lakuntza, Spain

is an approved manufacturer of
Iron Castings

in accordance with
DNV GL rules for classification – Ships

and the following particulars:

Iron type	Nodular cast iron
Casting method	Sand casting, Investment casting see page 2
Max. Weight	See page 2
Max. wall thickness	See page 2
Heat treatment condition	see page 2
Additional approval conditions	See page 2

Manufacturer(s) approved by this certificate is/are accepted to deliver according to DNV GL, DNV and GL rules. Materials to be applied to DNV GL classed object shall fulfill the material requirements in the applicable DNV GL class rules.

Issued at **Hamburg** on **2018-05-23**

for **DNV GL**

This Certificate is valid until **2020-06-30**.

DNV GL local station: **Bilbao**

Approval Engineer: **Enno Brück**

Thorsten Lohmann
Head of Section



Particulars of the approval

Cast iron

Iron type	Grade	Casting method ¹⁾	Max. weight [kg]	Heat treatment condition ²⁾
Nodular	VL NCI-1	SC, IC	20 000	F
	VL NCI-2			AC
	VL NCI 370			
	VL NCI 400			
	VL NCI 500			
	VL NCI 600			
	VL NCI 700			
	VL NCI 800			

Remarks:

- 1) SC: Sand casting
IC: Investment casting
- 2) AC: As cast
F: Ferritizing